IAP15 Rec'd PCT/PTO 07 JUL 2006 FORM PTO-1390 (Modified) U.S. PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE REV. 7-2005) ATTORNEY'S DOCKET NUMBER 265.00450101 TRANSMITTAL LETTER TO THE UNITED STATES U.S. APPLICATION NO. (If known, see 37 CFR 1.5) DESIGNATED/ELECTED OFFICE (DO/EO/US) 0/585503 CONCERNING A SUBMISSION UNDER 35 U.S.C. 371 INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PCT/US2005/000722 10 January 2005 09 January 2004 TITLE OF INVENTION MECHANOSENSITIVE ION CHANNELS AND METHODS OF USE APPLICANT(S) FOR DO/EO/US HAMILL, Owen P. MAROTO, Rosario Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: \boxtimes This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. 2. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), 3. (9) and (24) indicated below. \boxtimes The US has been elected (Article 31). 4. 5. \boxtimes A copy of the International Application as filed (35 U.S.C. 371 (c)(2)) a. 🗆 is attached hereto (required only if not communicated by the International Bureau). b. 🗆 has been communicated by the International Bureau. \boxtimes is not required, as the application was filed in the United States Receiving Office (RO/US). An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). a. 🗆 is attached hereto. b. 🗀 has been previously submitted under 35 U.S.C. 154(d)(4). Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3)) 7. 冈 a. 🗆 are attached hereto (required only if not communicated by the International Bureau). b. 🗆 have been communicated by the International Bureau.

have not been made; however, the time limit for making such amendments has NOT expired.

An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).

An English language translation of the annexes to the International Preliminary Examination Report under PCT

An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.

A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.

A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).

have not been made and will not be made.

An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).

An Information Disclosure Statement under 37 CFR 1.97 and 1.98.

A copy of the International Search Report (PCT/ISA/210). Items 13 to 23 below concern document(s) or information included:

A SECOND or SUBSEQUENT preliminary amendment.

A power of attorney and/or change of address letter.

A copy of the International Preliminary Examination Report (PCT/IPEA/409).

A second copy of the published International Application under 35 U.S.C. 154(d)(4).

EV 201876602 US

Article 36 (35 U.S.C. 371 (c)(5)).

A FIRST preliminary amendment.

A substitute specification.

Express Mail Label No.

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PTC-1390 (Rev. 07-2005)
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U.S. APPLICATION NO (if known, see 37 CFR 1.5) INTERNATIONAL APPLICATION NO. ATTORNEY'S DOCKET NUMBER */*585**503** PCT/US2005/000722 265.00450101

23. Other items or information:

> Application Data Sheet (2 pgs.); Transmittal Letter (1 pg. in triplicate); itemized stamped return postcard (1); Communication and Amendment Requesting Entry of Computer Readable Form (CRF) of the Sequence Listing (2 pgs.); copy of Sequence Listing in paper form (7 pgs.); Sequence Listing in computer form (1 diskette).

The following	g fees have been :	submitted	1 :				CALCULATIONS	PTO USE
24. 🛭 Basic national fee					00 3	\$300.00		
25. Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article \$0 All other situations. \$200						ı	\$ \$200.00	
If the written opiniby IPEA/US Search fee (37 Class an International Search previously of	6 indicates all clair FR 1.445(a)(2)) ha national Searching rch Report prepare communicated to t	or the Intensions satisfies been particularly Authorited by an the US by	ernational preliminary example provisions of PCT Article to the international apple. ISA other than the US and the IB.	33(1 pplica I prov)-(4) \$0 tion to the \$10 rided to the \$40	00	\$100.00	
	_ OF 24, 25 and						\$600.00	
Additional fer sequence lis listing in an example. The fee is \$2	e for specification ting in compliance electronic medium 150 for each additi		vings filed in paper over 10 CFR 1.821(c) or (e) or con R 1.492(j)). sheets of paper or fraction			3		
Total Sheets	Extra Sheets		ber of each additional 50 on thereof (round up to a wh		RATE			
66 - 100 =	0 /50 =		0		х	1	\$0.00	
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).						1	\$130.00	
CLAIMS	MS NUMBER FILED NUMBER EXTRA RATE							
Total claims	34	- 20 =	14	x	\$50.00	9	\$700.00	
Independent clain	ns 6	- 3=	3	x	\$200.00	9	\$600.00	
MULTIPLE DEPE	NDENT CLAIMS	if applica	able)	+		9	\$0.00	
TOTAL OF ABOVE CALCULATIONS =						= 3	\$2,030.00	
Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.					\$	\$1,015.00		
SUBTOTAL =					= §	\$1,015.00		
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).					\$	\$0.00		
TOTAL NATIONAL FEE =					= \$	\$1,015.00		
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +					\$	\$40.00		
TOTAL FEES ENCLOSED =					= \$	\$1,055.00		
					-	7	Amount to be	\$
						7	mount to be	\$

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of 1995, no persons are required to respond to a colbetton of information unless it displays a valid OMB control number

a. 🗀	A check in the amount of \$	to cover th	ne above fees is enclos	ia PUI/P	10 07 JUL 200			
b. 🔀	Please charge my Deposit Account No. A duplicate copy of this sheet is enclosed.	13-4895	in the amount of \$	\$1,055.00	to cover the above fees.			
c. 🛚	The Commissioner is hereby authorized to to Deposit Account No. 13-4895	• •	ditional fees which may copy of this sheet is en	•	credit any overpayment			
d. 🗀	Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.							
	Where an appropriate time limit under 37 e filed and granted to restore the Internation			tion to revive (37 CFR 1.137(a) or (b))			
SEND A	ALL CORRESPONDENCE TO:		1 20) L Provi	enec			
			SIGNATU	RE				
			David L.	PROVENCE	E			
			NAME					
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			07 J	uly 2006				
	•		DATE					

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AP20 Rec'd PCT/PTO 07 JUL 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applican	it(s):	HAMILL et al.									
Docket N	۱۰.:	265.00450101									
Title:	OF USE										
Mail Stor											
We are to	ransmitting t	he following documents alo	ng with this T	Transmittal Sh	eet (which i	is submitte	ed in triplicate):				
<u>X</u> <u>X</u>	Transmittal Submission Application	return postcard. Letter to the United States I Under 35 U.S.C. 371 (2 signormal states). Data Sheet (2 pgs.). ving (_ figs on _ sheets).) Concerr	ning a				
_	A certified o	opy of a applicat hich is claimed under 35 U.		o, fi	iled	, 200	_, the right of				
<u>X</u>	Other: Copy of Readable For Sequence Li	Other: Copy of International Search Report (5 pgs.); Assignment Recordation Form Cover Sheet (1 pg, lus copy of Assignment (2 pgs)); Communication and Amendment Requesting Entry of Computer Leadable Form (CRF) of the Sequence Listing (2 pgs); paper copy of Sequence Listing (7 pgs); equence Listing in computer readable form (CRF) (1 disk). Clease charge Deposit Account 13-4895 in the amount of \$1055.00 for the filing fee.									
		dditional fees or credit ove	erpayment to	Deposit Acc	ount No. 1.	3-4895. A	A triplicate				
MUETIN	581415, M	enclosed. H & GEBHARDT, P.A. Inneapolis, MN 55458		By: David Reg. No.: 43 Direct Dial:	3,022	ice	uer_				
<u>CERTIF</u>	ICATE UN	DER 37 C.F.R. 1.10:									
"Express	Mail" maili	ng label number: EV 2018	76602 US		Date of Dep	oosit: O	7 July 2006				
Office to	Addressee"	nis paper or fee is being dep service under 37 C.F.R. 1.1 tents, Mail Stop PCT, P.O. I By:	0 on the date Box 1450, Al	indicated abo	ve and is ac 22313-145	ldressed t					
											

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